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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,608	12/05/2003	Tatsuo Kasuga	12844.0055US01	2878

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EXAMINER

GORDON, STEPHEN T

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,608

Applicant(s)

KASUGA, TATSUO

Examiner

Stephen Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2005 and 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 3-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made **without** traverse in the reply filed on 11-22-04.

2. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 2 is somewhat confusing, and "a vehicle body" could be replaced with –the vehicle body—to clarify the claim in this regard.

Claim 6, the recited "other portions" in line 3 is confusing as it is not clear if/how such portions relate to the previously recited portions.

Claim 7, the recited "other portions" in line 3 is confusing as it is not clear if/how such portions relate to the previously recited portions. Additionally, "the portion of the hollow cast...thickness" in line 3 and "the other portion" in line 4 lack clear antecedent basis.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5, and 8, as newly presented and as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosak in view of Sano et al '094.

Kosak teaches a vehicle frame body (fig 1) including cast hollow longitudinally extending side frame members 11,12.

Claim 1, Kosak teaches that the frame members are hollow but fails to teach the use of longitudinally partitioning ribs.

Sano et al teaches a vehicle frame body including hollow longitudinally extending side frame members (13+) which include laterally extending stiffening ribs 22 (e.g. see figure 10) at regular intervals as broadly claimed. The ribs serve to partition the frame members longitudinally. In order to provide for a stiffer and/or stronger frame structure, it would have been obvious to one of ordinary skill in the art to include lateral ribs spaced longitudinally at regular intervals in the hollow side frame members of Kosak in view of the teachings of Sano et al.

With additional regard to claim 1 as newly amended, the modified Kosak device is deemed to define first and second frame halves as broadly claimed. Note the recitation of each half in the claim does not require that the halves be separate or separable. To that end, the upper and lower portions of the modified Kosak device fairly read on the defined halves as broadly recited.

Claim 5, the side members of Kosak as modified extend longitudinally along a vehicle and would clearly extend in front of or behind a passenger compartment as broadly claimed. Moreover, while it may be that the Kosak frame members are part of a suspension assembly, the frame members are deemed to define "main side frame members" as broadly claimed.

Claim 8, the frame members of Kosak as modified define rectangular hollow tube members. The bottom wall and sides of the tube define a first substantially U-shaped portion, and the top wall of the tube defines a substantially flat plate portion. As noted with regard to claim 1 as newly amended, while the top and bottom portions of Kosak as modified are not taught as being separate per se, they are fairly readable on the recited first and second "half" elements as broadly recited.

5. Claims 2, 6, and 7, as newly presented and as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosak in view of Sano et al '094 and further in view of Yamada et al '654.

Claim 2, Kosak as modified by Sano et al discussed above regarding claim 1 teaches all of the claimed features except that the thickness of the frame portions where the ribs are provided is set larger than the thickness of other portions. It is notoriously well known in the art to provide radiused fillets between members at inside corner type intersections to reduce stress concentrations. In an effort to provide a more concrete example of this concept, applicant should note section 4, lines 30-35 of Yamada et al. Yamada et al teaches using rounded fillets at a corner intersection to reduce stress concentration.

In order to reduce stress concentrations at the intersections between the ribs and the frame members of Kosak as modified by Sano et al and thereby alleviate a potential source of part failure, it would have been obvious to one of ordinary skill

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in the art to provide radiused fillets at these intersections in view of the teachings of Yamada et al. Such fillets would define a larger thickness of the frame member at portions where the ribs are provided as broadly recited in claim 2.

New claim 6, the modified Kosak/Sano et al/Yamada et al device would define the recited thicknesses and widths as broadly claimed and as best understood.

New claim 7, the modified Kosak/Sano et al/Yamada et al device would define the recited thicknesses and widths as broadly claimed and as best understood.

6. Claims 1, 5, 8, and 9, as newly presented and as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '083 in view of Kosak.

Japanese '083 teaches a vehicle body frame (fig 1) including hollow longitudinally extending side frame members (including elements 14E, 16+).

Claim 1, '083 teaches that the frame members are hollow and include longitudinally portioning ribs 30+ but fails to clearly teach that the frame members are cast.

Kosak teaches the use of casting as a method of forming longitudinal vehicle frame members.

In order to provide for relatively inexpensive fabrication of the frame members, it would have been obvious to one of ordinary skill in the art to fabricate the hollow side frame members of Japanese '083 via casting in view of the teachings of Kosak.

With additional regard to claim 1 as newly amended, the modified '083 device is deemed to define first and second frame halves as broadly claimed. Note the elements 14 and 16 define distinct halves.

Claim 5, the side members of '083 as modified extend longitudinally along a vehicle and would clearly extend in front of or behind a passenger compartment as broadly claimed. Moreover, the frame members are deemed to define "main side frame members" as broadly claimed.

Claim 8, the frame members of '083 as modified define rectangular hollow tube members. The elements 14A,C, and E define a first substantially U-shaped half, and the top wall 16 of the tube defines a substantially flat plate as broadly claimed.

Claim 9 as newly presented, '083 teaches the use of fasteners to attach the first and second halves and fails to clearly teach welding. Welding of vehicle frame members per se is a notoriously well known method of attachment in the art. In order to create a stronger frame structure, it would have been obvious to one of ordinary skill in the art to attach the first and second halves of the frame members of '083 via welding in view of known art practices.

7. Applicant's arguments filed 5-25-05 have been fully considered but they are not persuasive. Regarding applicant's remarks directed toward Kosak in view of Sano et al., as discussed in more detail above, the modified Kosak device is deemed to define first and second halves *as broadly claimed*. Additionally, the examiner remains of the position that the addition of ribs to Kosak in view of the teachings of Sano et al in order

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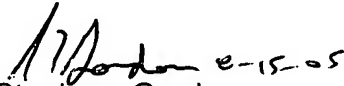
to add strength would have been an obvious modification to one of ordinary skill in the art. Certain applications of Kosak may require additional strength, and the addition of partitions as taught by Sano et al would have been an obvious method of achieving such an end. Moreover, added strength from the partitions taught by Sano et al would additionally provide for more safety/protection. Regarding applicant's remarks as they apply to newly presented claim 5, the instant claim as presented does not require that the frame members are designed to deform to absorb energy in a collision for protection of occupants. Additionally, as discussed in more detail above, the frame members of Kosak are deemed fairly readable on "main" frame members as broadly claimed.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gordon whose telephone number is (703) 308-2556. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephen Gordon
Primary Examiner
Art Unit 3612

stg